ICP DAS

# WF-2571 FAQ

FAQ Version 1.1

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#### Q1: WF-2571 doesn't work at Ad-Hoc mode. What should I do?

A1: Please follow these steps to check the Ad-Hoc mode configurations.

Step 1. Connect WF-2571 with USB cable.

Step 2. Open WF-2571 Utility and select the USB device "WF-2571".

Step 3. Click "Read para" to read the configurations of WF-2571.

Step 4. Please check the Ad-Hoc settings of WF-2571 :

Wi-Fi Connection	Ad-Hoc: Use Ad-Hoc connectivity with another WF-2571 to create an Ad-Hoc
Mode	wireless network.
SSID	Service set Identifier : Connected devices must be with the same SSID, SSID
	length must not exceed 20 characters.
WLCH	1~13: Wi-Fi transmission channel setting.
	When WF-2571 is configured to operate in Ad-Hoc mode, this parameter must
	be given a value between 1 and 13 that defines the channel to be used for
	beacon transmission. When WF-2571 joins an already existing Ad-Hoc network,
	it adopts that network's channel.
Encryption	NONE/WEP64/WEP128: Wi-Fi Encryption of Wi-Fi, connected devices must with
	the same encryption. Not Support WPA  VPA2 encryption in Ad-Hoc mode.
WLK	Key of Encryption, connected devices must with the same Key.
	WEP64 : Key length must be 10 characters.
	WEP128 : Key length must be 26 characters.

🧊 WF-2571 Utility v1.1	X
<u>File A</u> bout	
Select Device	Signal Strength Get
Wi-Fi Connection Mode	
WLCH Encryption	WLK 1234567890
MAC Address	Get MAC Address
	Firmware Information
Read para Write para	Version Date Created
	1.2 2013/10/24

Figure1. Ad-Hoc Settings example of WF-2571

Step 5. Click "Write para" to complete the configurations.

Step 6. Set the same configurations on the other WF-2571.

Please check the signal strength LED or the Wi-Fi connection list (you can find the SSID of WF-2571 on the list) after setting WF-2571. If it still doesn't work, connect an antenna or amplifier and try again.

#### Q2: WF-2571 doesn't work at AP mode. What should I do?

A2: Please follow these steps to check the AP mode configurations.

Step 1. Connect WF-2571 with USB cable.

Step 2. Open WF-2571 Utility and select the USB device "WF-2571".

Step 3. Click "Read para" to read the configurations of WF-2571.

Step 4. Please check the AP settings of WF-2571 :

Wi-Fi Connection	AP: Use the wireless access point way for connection and transmission. (Must
Mode	have Wi-Fi AP)
SSID	Service set Identifier : Connected devices must be with the same SSID, SSID
	length must not exceed 20 characters.
WLCH	1~13: Wi-Fi transmission channel setting.
	When WF-2571 is configured to operate in AP mode, the default value of WLCH
	is 0.
Encryption	NONE / WEP64 / WEP128 / WPA-PSK(TKIP) / WPA2-PSK(AES) : Encryption of
	WiFi, connected devices must with the same encryption.
WLK	Key of Encryption, connected devices must with the same Key.
	WEP64 : Key length must be 10 characters.
	WEP128 : Key length must be 26 characters.
	WPA-PSK(TKIP) : Key length must between 8~63 characters.
	WPA-PSK(AES) : Key length must between 8~63 characters.

### **TP-LINK AP Settings**

TP-LINK <sup>®</sup>		WF-2571 Settings
Status Basic Settings Quick Setup	Wireless Settings - AP	S WF-2571 Utility v1.1
Working Mode Network Wireless Wireless Security MAC Filtering Wireless Advanced Wireless Statistics Advanced Settings DHCP Maintenance	SSD:       TP-LINK_719A20         Region:       United States         Warning:       Ensure you select a correct country to conform local law. Incorrect settings may cause interference.         Channel:       Auto         Mode:       11 bgn mixted         Channel Width:       Auto	Select Device KTPDAS WF-2571 Wi-Fi Connection Mode AP TP-LINK_719A70 WLCH WLCH WPA2-PSK(AES)
System loois		MAC Address FF - FF - FF - FF - FF Get MAC Address 0, 0 me Read para Write para Firmware Information Version Date Created 1.2 2013/10/24 8 and 63 or Hexadecimal chars 10, 0 means no update)

#### Figure 2. AP Settings example of WF-2571

Step 5. Click "Write para" to complete the configurations.

Please check the signal strength LED after setting WF-2571.

- If it doesn't work and the link Led does not light on, please refer to the Q4.
- If the Wi-Fi connection is not stable, please connect an antenna or amplifier.
- The signal strength is good enough, but the Wi-Fi connection is still unstable. Please check the security type of Wi-Fi AP. The WPA1/WPA2 Mixed mode may cause the problem. You can disable the security type of Wi-Fi AP and set the "Encryption" of WF-2571 to "NONE".

#### Q3: How to get the MAC address of Ethernet device with "Get MAC Address" button?

A3: If you want to get the MAC address with "Get MAC address" button, you must check the connection between Ethernet device and PC first.

Step 1. Make a connection between PC and Ethernet device directly.

Step 2. Check the connection with Ping Command on PC side.

C:\WINDOWS\system32\cmd.exe	- 🗆 🗙
Microsoft Windows XP [版本 5.1.2600] <c> Copyright 1985-2001 Microsoft Corp.</c>	<b>_</b>
C:\Documents and Settings\明頴>cd \	
C:∖>ping 192.168.22.38 -t	
Pinging 192.168.22.38 with 32 bytes of data:	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time=1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Reply from 192.168.22.38: bytes=32 time<1ms TTL=100	
Ping statistics for 192.168.22.38:	<b>•</b>

Figure 3. Ping Command "ping 192.168.22.38 -t"

Step 3. Open WF-2571 Utility and click "Get MAC Address" button.

-MAC Address	
FF - FF - FF - FF - FF - FF	Get MAC Address

Figure 4. "Get MAC Address" button

Step 4. Fill out the IP address of Ethernet device and click "Get MAC" button.

Get MAC Address	Dialog	X
IP Address:	192 . 168 . 22 . 38	
Adapters:	Atheros AR8131 PCI-E Gigabit Ethernet Controller - 💌	
	Get MAC	
MAC Address:	00 18 23 01 6A 37	
	Exit	

#### Figure 5. Get MAC Address Dialog

Step 5. The MAC address will be shown on the WF-2571 Utility.

MAC Address	
00 - 18 - 23 - 01 - 6A - 37	Get MAC Address

Figure 6. MAC address of your Ethernet device

#### Q4: When I boot WF-2571, the Link LED does not light on. Why?

A4: The WF-2571 sends ARP request to the Ethernet device periodically. If the Ethernet device does not reply the ARP message, the Link LED is turned off and the connection is failed. There are two ways to solve the problem.

(1) To set the MAC address of Ethernet Device on WF-2571.

Step1. Connect USB cable to the WF-2571.

Step2. Open WF-2571 Utility and click "read parameters".

Step3. Fill out the MAC address of Ethernet device. (Q3)

Step4. Click "write parameters".

-	
🏂 WF-2571 Utility v1.1	
<u>File A</u> bout	
Select Device	Signal Strength Get
Wi-Fi Connection Mode	SSID
AP 💌	TP-LINK_719A70
WLCH Encryption     2   V       WPA2-PSK(AES)	WLK
MAC Address	3
मन - मन - मन - मन - मन - मन	Get MAC Address
2	4
	Firmware Information
Read para Write para	1.2 2013/10/24

Figure 7. MAC address setting

When the process is done, the Ethernet Device is connected by the MAC address that you set on the WF-2571.

(2) The ARP message is usually sent by the following case:

- Reboot the Ethernet Device.
- Reconnect the Ethernet connector.

Please keep the WF-2571 running and try the 1<sup>st</sup> and 2<sup>nd</sup> case.

#### Q5: What should I do to make the Wi-Fi signal strength better?

A5: When the WF-2571 make Wi-Fi connection with AP/Ad-Hoc mode, the transmission packet loss depends on the Wi-Fi signal strength. Please refer to the following tips to make your Wi-Fi signal strength better.

(1) Add a bigger External-Antenna.

http://www.icpdas.com/root/product/solutions/industrial\_wireless\_communication/wlan\_products/exter nal\_antenna.html

(2) Set the Wi-Fi devices closely.

(3) Extend the Wi-Fi antenna with the extension cable. To make the Wi-Fi antenna closely.

http://www.icpdas.com/root/product/solutions/accessories/cable/cable\_selection.html

(4) Do not install the Wi-Fi device nearby the iron obstacles.

(5) Check the antenna pattern.

(6) Add an amplifier.

http://www.icpdas.com/root/product/solutions/industrial\_wireless\_communication/wlan\_products/anf-2 401.html

If you try all the tips but they do not work. It may be interfered with unknown EMI. Please install your Wi-Fi module in the iron box to reduce the interference (The antenna must be extend out of the iron box ).